

Application No. 10/534,747
Amendment dated June 25, 2007
Reply to Office Action of January 24, 2007

Page 4

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Claims 1 - 28 (canceled)

29. (new) A molding system including a plurality of mold blocks which move along a molding path to form double wall plastic pipe having an outer wall with corrugations which define an outside dimension of the pipe and an inner wall around a pipe bore through the pipe; each mold block having a first profiled face defining a series of troughs with adjacent troughs being separated by crest mounting portions that each cooperate with and mountingly support removable first crest forming parts; said series of troughs and said crest mounting portions being integral with the mold block; said first profiled face having a first interior cooling plug sized to cooperate with said removable first crest forming parts and determine said inner wall of a first double walled pipe; said crest mounting portions including a stepped profile between adjacent troughs that cooperate with with a mating profile of said removable first crest forming parts and align said crest forming parts between said troughs; each crest forming part at opposite ends thereof including a recess that cooperates with a recess of said mold block to collectively define securement cavities in abutment faces of each mold block; each crest forming part when mounted on one of said crest mounting portions and aligned with said mold block being secured thereon by two mounting bracket arrangements located at opposite ends of the crest forming part in said securement cavities; each crest forming part, with the respective mounting bracket arrangements in a non engaged position, allowing dismounting of the crest forming part by radial separation of said crest forming part from the respective crest mounting portion; said first crest forming parts being replaceable with second crest forming parts to define a second profiled face; said second

Application No. 10/534,747
Amendment dated June 25, 2007
Reply to Office Action of January 24, 2007

Page 5

profiled face having a second interior cooling plug sized to cooperate with said removable second crest forming parts and determine said inner wall of a second double walled pipe; said first and second profiled faces having a common outer profile defined by said integral troughs and a variable inner profile and corrugations defined by the first and second crest forming parts and said respective first and second cooling plugs; said mounting bracket arrangements of each crest forming part in an engaged position, maintaining an abutment of the mounted crest forming part on the respective crest mounting portion; said first and second crest forming parts having the same mating profile for mounting on said crest mounting portions of said mold blocks.

30.(new) A molding system as claimed in claim 29 wherein each mounting bracket arrangement includes a bracket secured by a bolt in engagement with the mold block; each bracket includes an arm received in a recess of each crest forming part and a second arm received in a recess in said mold block; each bracket cooperating with said recess in the respective crest forming part and the recess in said mold block to abut said crest forming part and said crest mounting portion as said bolt moves said bracket to an engaged position.

31.(new) A molding system as claimed in claim 29 wherein each mold block includes vacuum channels having a fixed relationship with said integral troughs.

32.(new) A molding system as claimed in claim 29 wherein each crest forming part includes a projecting shoulder received in a mating recess of a respective crest mounting portion to locate said crest forming parts on said crest mounting portions.

33.(new) A molding system as claimed in claim 29 wherein said first crest forming part is longer than said second crest

Application No. 10/534,747

Amendment dated June 25, 2007

Reply to Office Action of January 24, 2007

Page

6

forming part and said first cooling plug is of smaller diameter than said second cooling plug.

34. (new) A molding system as claimed in claim 29 wherein said profiled faces of said mold blocks when configured with the first face profile forming the pipe with a first corrugation depth and a first bore diameter and when configured with the second face profile forming the pipe with a second corrugation depth great than the first corrugation depth and a second bore diameter less than the first bore diameter.

35. (new) A pipe molding apparatus for making a continuous length of plastic pipe, said apparatus comprising first and second mold block sections each having profiled faces formed by crests and troughs on the profiled faces of the mold block sections, a first set of face attachments and a second set of face attachments, the first and second sets of face attachments being interchangeably and releasably insertable on to the profiled faces of the mold block sections, and first and second cooling plugs of diameters differing from one another, the first and second mold block sections circulating to and away from a molding tunnel of the apparatus which contains one of said cooling plugs, the mold tunnel receiving a continuous stream of molten plastic to form the pipe over the one of the cooling plugs with an internal bore and receiving a further stream of molten plastic to form a wall having an undulating exterior surface around said bore, the undulating surface defining external diameter of the pipe, the first mold block sections closing with the second mold block sections to form a moving line of closed mold blocks while circulating through the mold tunnel and the first and second mold block sections parting from one another while circulating away from and back to the mold tunnel, said apparatus when in a first set up condition producing the pipe with a first bore diameter when the first set of face attachments are fitted to the profiled faces of the first and second mold block sections and when the first cooling plug is placed in the mold tunnel

Application No. 10/534,747
Amendment dated June 25, 2007
Reply to Office Action of January 24, 2007

Page 7

and the apparatus when in a second set up condition producing the pipe with a second bore diameter different from the first bore diameter while maintaining essentially constant wall thickness of the pipe when the second set of face attachments are fitted to the profiled faces of the first and second mold block sections and secured at the ends of the mold block sections and when the second cooling plug is placed in the mold tunnel, the external diameter of the pipe remaining constant in both the first and the second set up conditions of the apparatus; and wherein each mold block includes integral trough portions that define the external diameter of the pipe; said integral trough portions having a fixed relationship with vacuum channels of each mold block.

36.(new) A pipe molding apparatus as claimed in claim 25 wherein said first and second set of attachments are releasably secured in recesses provided in end faces of the mold blocks.